



Maryland Utility Incentives

Prepared for:

Next-Gen Manufacturing Energy Forum

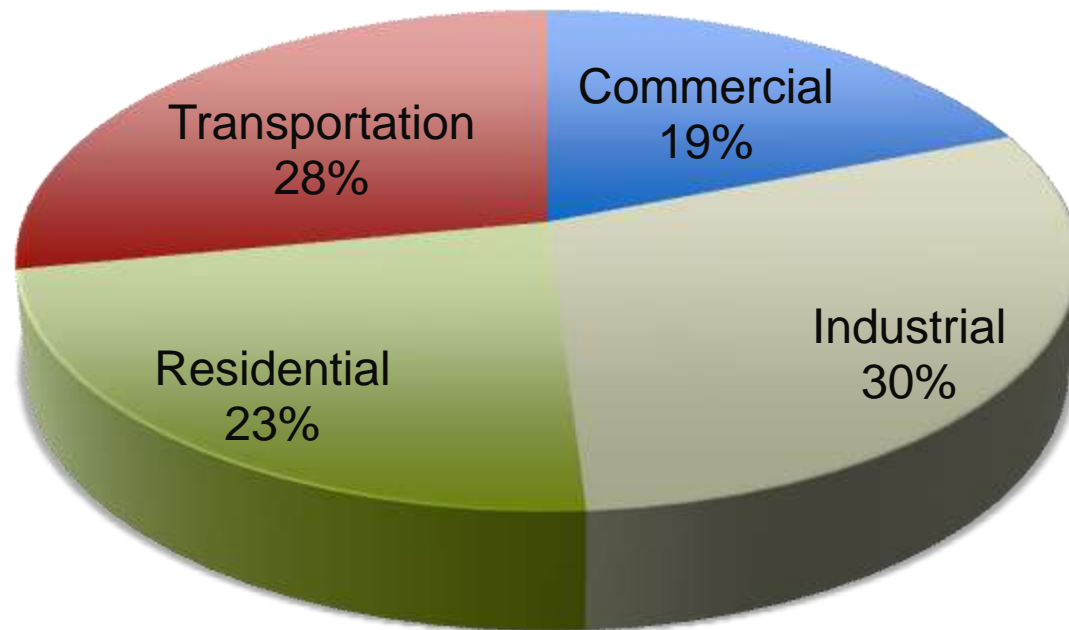
June 6, 2012

Agenda

1. Opportunities and Challenges
2. Commercial & Industrial Energy Efficiency Programs in Maryland
 - Prescriptive
 - Custom
 - Retrocommissioning Services
 - Technical Services
3. Engaging Local Market Actors
4. Trends
5. Open Discussion

Share of Energy Consumed by Major Sector of the Economy, United States: 2010

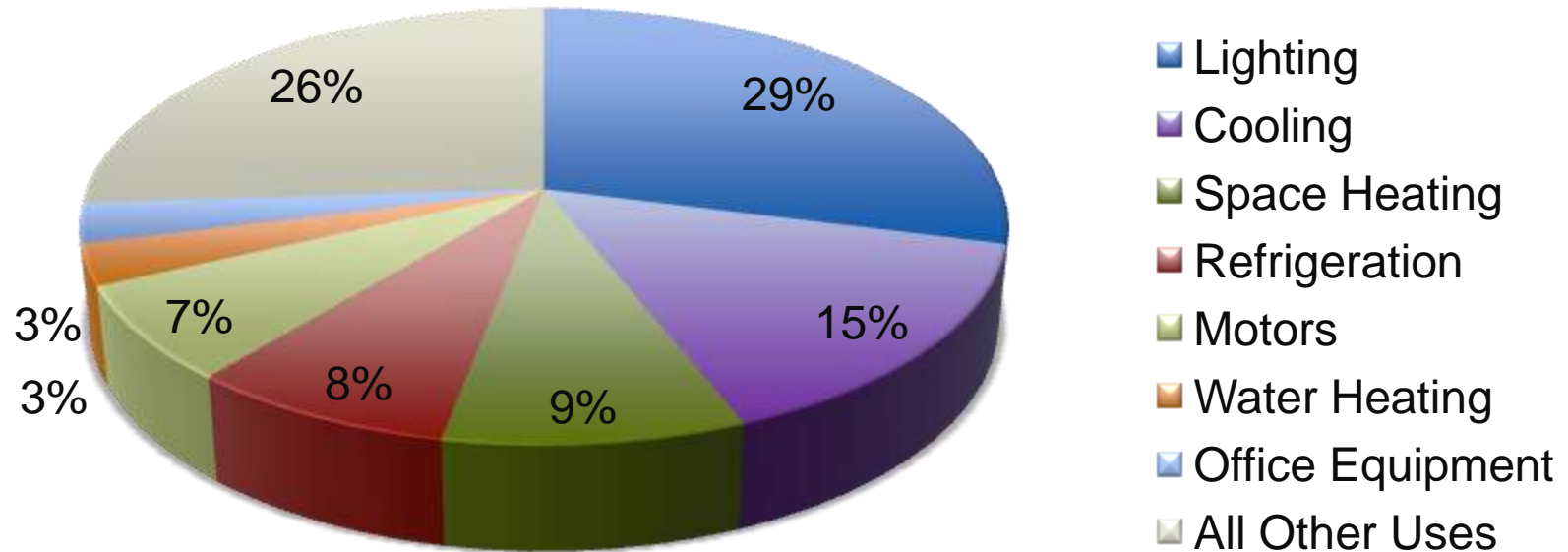
Source: U.S. Energy Information Administration



Energy Usage- Non-Residential Buildings

Non-Lighting Opportunities

Source: DOE EIA



Challenges for small/mid size manufacturers



Challenges	Solutions
Expensive efficient equipment coupled with poor economic conditions	<ul style="list-style-type: none">▪ Free, third-party analysis and recommendations through trade allies▪ Offers you rebates to help offset the cost of efficient equipment – combine utility and MEA incentives
Customers lack technical resources	<ul style="list-style-type: none">▪ Broad education and information about simple operational changes and initiatives that provide on-going savings
Inadequate time, capital and awareness	<ul style="list-style-type: none">▪ Trade ally networks and referral programs to help identify appropriate contractors▪ Account Manager support to keep you involved and moving through the installation steps▪ Offer simple maintenance tips for ongoing savings
Customer skepticism of actual energy-savings	<ul style="list-style-type: none">▪ Case studies document completed projects with energy savings and monetary savings

Maryland Commercial & Industrial Energy Efficiency Offerings by Utility

Program Offerings	Utilities				
	BGE	SMECO	PEPCO	Delmarva Power	Potomac Edison
	Prescriptive	X	X	X	X
	Custom	X	X	X	X
		Retrofit: 50% New Construction: 75%	Retrofit: 50% New Construction: 75%	\$.16 / annual kWh saved	\$.05 / kWh saved
	New Construction	X	X	X	X
	RCx Services	X	X	X	
	Technical Services	X	X	X	X
	Small Business	X	X	X	X (audit program only)
	Training	X	X	X	X
		Service Provider Trainings	Trade Ally Trainings	Operations & Maintenance Training, Occupant Training	BOC Training Tuition Reimbursement
	Combined Heat and Power (CHP)	X	X	X	

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Prescriptive Offerings

- Simplistic program track which incentivizes a portfolio of common industry measures
- Opportunities for retrofits, equipment that is at the end of its useful life and new construction
- Incentives cover up to 50% (labor & materials) for retrofit projects or up to 75% (materials only) of incremental costs for new equipment
- Pre-determined, measure-based incentives
- Pre-determined eligibility criteria
- Incentives available for:
 - Lighting
 - HVAC systems
 - VFDs
 - Commercial Plug Load, Kitchen/Refrigeration equipment



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Custom Offerings



- Opportunities for retrofits, equipment that is at the end of its useful life and new construction
- Site-specific, cost-effective measures not part of Prescriptive track
- Typically projects include:
 - Induction lighting
 - Energy management systems
 - Compressed air systems
 - Central chiller plant
 - Process equipment
 - Non-HVAC VFDs

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Retrocommissioning Services

- RCx is the process of monitoring, troubleshooting and adjusting electrical, mechanical and control systems in existing buildings to optimize energy performance
- Helps customers identify and implement low-cost/no-cost improvements to operating systems within existing buildings
- Focuses on existing system performance rather than equipment replacement
- Benefits include:
 - Returning equipment to its proper operational state
 - Extended equipment service life
 - Reduced maintenance and repair costs
 - Improved occupant comfort and reduce complaints
 - Improved outside air control and indoor air quality
 - Adjusted and corrected equipment operating schedules



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Technical Services

- Engineering services to help you to identify and evaluate energy-saving opportunities
- Pool of pre-qualified local engineering firms
- Incentive options range from detailed audits, feasibility studies, design assistance, and commissioning
- Typical studies include:
 - Comprehensive compressed air analysis
 - Process improvements
 - End of life chiller
 - End of life chiller replacements



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Engaging the Local Market Actors



- Partnership with MEA
- Building a strong network of local trade allies
 - Architectural & Engineering Firms, Mechanical Contractors, Electrical Contractors, Distributors, Manufacturers
- Provide tools and training to Trade Allies
 - Allows for dissemination of information from Trade Allies to Customers without Utility Program Representative involvement
- Partnerships with local Industry Associations
 - AFE, AEE, BOMA, IES, RMI, ASHRAE
- Host Lunch and Learns



What are we seeing?

- Improving economy is spurring renewed interest in energy efficiency projects
- Energy is the new Quality - corporate sustainability policies being met by leveraging utility programs
- Customers packaging other resources – state, local, federal
- Increased interest in Continuous Improvements
- Increased interest in Deep Retrofits
- Prescriptive measures still more popular than custom or RCX
- Significant low hanging fruit remain within the small/mid size manufacturing sector

Low Hanging Fruit Example



Incentive \$40–\$85/
fixture

Minimum Savings 70–200w/
fixture

Application Example

Existing fixture:

- HID high bay fixture
- 400-watt metal halide lamp
- Electromagnetic ballast
- 455 system watts

Proposed:

- Fluorescent high bay fixture
- (4) 54w T5HO lamps
- High-efficiency electronic ballast
- 234 system watts

Savings:

- 221 watts (49%) savings

Open Discussion

